REPORT ON THE MYCOLOGICAL DIAGNOSTIC SERVICE QUEEN'S UNIVERSITY, BELFAST, 1962

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In the fourth year since its inception in 1959 the Mycological Laboratory of the Department of Microbiology, Queen's University of Belfast, continued to provide a diagnostic service for the isolation and/or identification of fungi associated with human sources. During 1962 mycological examinations were made on 1,322 specimens from 1,000 patients from thirty hospitals, clinics or laboratories, dermatological or general practices in Northern Ireland. The presence of pathogenic fungi was confirmed by microscopy or culture of material from 362 patients (36.2 per cent.). As in previous years, most specimens originated from dermatological clinics and practices, but a substantial number (10 per cent.) were derived from elsewhere.

TABLE 1.

RINGWORM FUNGI ISOLATED DURING 1962.

	No. Isolated
Trichophyton verrucosum	108
T. mentagrophytes	29
Microsporum canis	21
T. tonsurans var. sulfureum	19
Epidermophyton floccosum	18
T. rubrum	17
Positive by microscopy alone	69
T. interdigitale	6
Unidentified	3
M. gypseum	1
T. schœnleinii	1
TOTAL	292

RINGWORM.

Ringworm fungi (Table 1) accounted for almost 80 per cent. of the pathogens isolated during 1962.

When compared with previous years, two major trends are evident, viz.:

(1) An increase in the number of animal (zoophilic) species isolated, and

(2) A continued reduction in the numbers of isolates of *Trichophyton tonsurans var. sulfureum.*

More than half of all infections confirmed by mycological investigation were attributable to "cattle ringworm" (*T. verrucosum*) and it is this species alone which is responsible for the overall increase in incidence of "animal" ringworm infections.

Since there was no increase in the number of specimens from patients believed to be infected with cattle ringworm, it is possible that this represents a true increase. No quantitative estimate of its true incidence in Northern Ireland can be attempted, but in view of the widespread familiarity with the ætiology of this condition it is likely that those patients referred to dermatological clinics represent only a fraction of the annual total: consequently it may be no exaggeration to suggest that within the Province the number of infections may be measured in hundreds.

As in 1961, there were comparatively few implications (21) of cats and dogs as sources of ringworm (*Microsporum canis*). One dog in a Belfast district infected at least six children in the neighbourhood before it was located and the lesion successfully eradicated.

The second trend noted, viz., the reduction in numbers of tinea capitis confirmed, is partially obscured by the overall increase in infections caused by *T. verrucosum* which includes sixteen scalp infections. Nevertheless, only seven scalp infections with *T. tonsurans var. sulfureum* were confirmed during 1962, the lowest figure obtained to date for this species. Infections with this organism apparently now occur only as isolated cases, without any predominant age group or clinical presentation.

One isolate of unusual interest and the first case seen for many years in Northern Ireland confirmed the presence of favus (*T. schœnleinii*) in a 15-year-old girl whose scalp infection had been acquired seven years previously. Within this girl's family there apparently had been an unbroken history of infection for over forty years, an association that was finally ended by a successful course of griseofulvin therapy.

Other Pathogenic Fungi.

Candida albicans was identified on fifty-one occasions from skin (8), nails (8), groin (7), sputum (5), feet (4), throat (3), tongue (3), hand (2), mouth (2), scalp (2), pus (2), fæces (2), vulva (1), ear (1), breast (1). As with cattle ringworm, this is unlikely to bear any relationship to the actual number of infections.

Fifteen infections of middle ear and mastoid cavities were attributed to *Aspergillus niger* (5), *A. terreus* (5), *A. flavus* (3), and *A. fumigatus* (2).

Aspergillosis (caused by *A. nidulans*) in a 6-year-old boy was investigated, a unique feature being destructive lesions of vertebræ and ribs.

Malassezia furfur, the cause of pityriasis versicolor was recorded on seven occasions, whilst other pathogens included *Actinomyces israelii* (1), *Nocardia minutissima* (1), and *Scopulariopsis brevicaulis* (1).